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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,094	02/15/2002	Jeffrey L. Milner	EP-7541 A	9149
7590 07/16/2004			EXAMINER	
Dennis H. Rainear, Esq. Ethyl Corporation 330 South Fourth Street Richmond, VA 23219			MCAVOY, ELLEN M	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

S.C.

Office Action Summary	Application No. 10/076,094	Applicant(s) MILNER ET AL.	
	Examiner Ellen M McAvoy	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-23 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Griffith (5,552,068) in combination with Smalheer et al and/or Walters et al (5,700,764).

Applicants' arguments filed 5 May 2004 have been fully considered but they are not persuasive. As set forth in the previous office action, Griffith discloses lubricating oil compositions having balanced anti-wear/extreme pressure and stability properties when used as industrial oils, hydraulic oils and gear oils while providing friction reduction and reduced copper corrosivity which comprises (1) a major amount of a lubricating oil basestock and (2) a minor amount of an amine phosphate salt of formula (I) set forth in the abstract and in column 1, lines 45-50. The examiner maintains the position that the amine phosphate salts of Griffith meet the limitation of the phosphorus-containing anti-wear agent of the claims. Suitable lubricating oil basestocks include natural oils such as mineral oils and synthetic oils, and Griffith teaches that, **if desired**, other additives known in the art may be added to the composition including ashless dispersants, antioxidants, and other extreme pressure additives which are typically disclosed in Smalheer et al ["Smalheer"]. See column 4, lines 15-24. Griffith does not require the addition of any metal-containing compounds and Griffith does not require the addition of any dispersant additives. Applicants have amended the independent claims to include the proviso that "wherein

the gear oil is essentially free of an ashless dispersant” and argues that nothing in Griffith alone or in combination with Smalheer or Walters disclosed, points to, or suggests such a gear oil or method of making such a gear oil. This is not deemed to be persuasive since Griffith does not require the addition of any dispersant additives. Furthermore, none of the Examples set forth in Griffith add an ashless dispersant to the oil compositions. Griffith teaches that excess amine can interfere with the antiwear performance of the amine phosphate and that amine phosphates may be blended at concentrations to give 200 ppm phosphorus. See column 6, lines 46-55. As previously set forth, applicants’ invention appears to differ by further including a metal-free sulfur-containing extreme-pressure agent such as a sulfurized olefin or polysulfide to the composition. However, as evidenced by Smalheer, such additives are conventional in the lubricant art.

Smalheer sets forth various conventional lubricant additives including automotive extreme pressure additives for gear oils. See page 9, last paragraph, to page 10, where metal-free sulfur-containing agents are taught such as sulfurized fatty oils and alkyl polysulfides. Walters et al [“Walters”] is added to show that applicants’ preferred sulfur-containing extreme pressure agents, namely sulfurized olefins and alkyl polysulfides, are well-known in the art as additives to gear oil compositions. See column 4, lines 24-47. Thus, the examiner maintains the position that having the applied prior art references before the inventors at the time the invention was made it would have been obvious to have added a conventional metal-free sulfur-containing extreme pressure agent to the composition of Griffith if its’ known imparted property was so desired.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

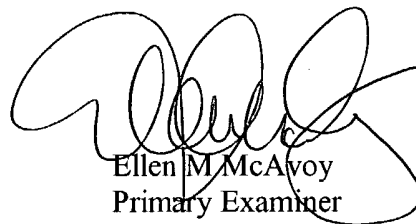
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen M. McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
July 13, 2004